R E M A R K S

- Claims 1, 2, 18, and 20 to 31 remain pending
- Claims 1, 18 and 24 are the only pending independent claims
- Claims 1, 18, and 24 through 26 have been amended herein, no new matter has been added

SPECIFICATION OBJECTION

The specification stands objected to as not providing proper antecedent basis for the claim term "subset." Applicants respectfully traverse the Examiner's objection. Applicants are using the plain English meaning of the word "subset," namely, "a part of a larger group of related things." (see, e.g., Oxford English Dictionary, Third Edition, 23 June 2005) Throughout Applicants' specification, the concept of selecting only part of a larger group of latches in a circuit design is described. See for example, page 8, line 26 to page 9, line 14 wherein a method of selecting latches to treat as transparent is described. The selected latches are a subset of the larger group of all latches in a circuit design. Thus, no special meaning is attributed to the claim term "subset;" the concept is clearly described in the specification (albeit without using the particular term); and the specification supports the use of the term in the claims. Therefore, Applicants respectfully request withdrawal of the Examiner's objection to the specification.

DRAWING OBJECTION

The drawings stand objected to as not showing every feature of the invention specified in the claims. Specifically the Examiner objects to Claim 24 which recites the term "a timing verification tool." Applicants have amended Claim 24 to recite "a timing tool," which is shown in the drawings at least

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in Fig. 1, ref. num. 104. Thus, amendment of the drawings is obviated and Applicants respectfully request withdrawal of the Examiner's objection to the drawings.

CLAIM OBJECTIONS

Claims 1, 18, and 24 stand objected to for a number of reasons labeled by the Examiner in the Office Action with letters a. through g.

a. Applicants have amended the preambles of the objected to claims to conform to the Examiner's requirements. However, Applicants respectfully object to the Examiner's requirements given there is no basis in the law to require such amendment. Thus, Applicants respectfully request withdrawal of the Examiner's objection "a."

b[1]. Applicants have amended Claims 1 and 24 to correct the lack of antecedent basis of the term "timing behavior." Thus, Applicants respectfully request withdrawal of the Examiner's objection "b[1]."

b[2]. The Examiner objects to Claims 1, 18, and 24 based on Applicants' use of the terms "non-transparent" and "transparent." Applicants respectfully traverse the Examiner's objection. The Examiner appears to be requiring that Applicants include additional limitations to Claims 1, 18, and 24 to define the terms "non-transparent" and "transparent." However, these terms are clearly defined throughout Applicants' specification. See, for example, at least page 2, lines 6 to 32. Applicants respectfully object to the Examiner's requirement given there is no basis in the law to require inclusion in the claims of such definitions. Thus, Applicants respectfully request withdrawal of the Examiner's objection "b[2]."

c. The Examiner objects to the phrase "timing tool models each latch of the circuit design as being non-

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transparent" as being "an incomplete claim structure."
Applicants respectfully traverse the Examiner's objection.
Applicants respectfully assert that the quoted phrase as it
appears in Applicants' claims is in fact complete and the
meaning is clear, particularly in light of the specification.
See, for example, at least page 9, lines 5 to 8: "a circuit
designer may perform an initial timing run on an integrated
circuit without including any delay values for local clocks
(e.g., with all latches being treated as non-transparent)."
Thus, Applicants' specification clearly describes a method of
how a latch may be modeled as non-transparent: "without
including any delay values for local clocks." The Examiner is
respectfully reminded that Applicants are not required to
recite definitions in the claims and that language that
encompasses multiple methods may be used. Therefore,
Applicants respectfully object to the Examiner's requirement to
further narrow Claims 1, 18, and 24 without providing a
reference that discloses Applicants invention as claimed.
Absent such a reference, Applicants respectfully request
withdrawal of the Examiner's objection "c."

       d. The Examiner asserts that the term "subset" must
be defined in Claims 1, 18, and 24. Applicants respectfully
traverse the Examiner's objection. Applicants respectfully
disagree with the Examiner's assertion and object to the
Examiner's assertion given that there is no basis in the law to
require inclusion in the claims of such a definition. As
described above with respect to the Specification Objection,
Applicants are using the plain English meaning of the term.
Thus, Applicants respectfully request withdrawal of the
Examiner's objection "d."

       e[1]. The Examiner objects to the phrase "allow a
subset of one or more latches of the circuit design to exhibit
latch transparency" as being "an incomplete claim structure."

Applicants respectfully traverse the Examiner's objection.
Applicants respectfully assert that the quoted phrase as it
appears in Applicants' claims is in fact complete and the
meaning is clear, particularly in light of the specification.
See, for example, at least page 2, lines 6 to 18 and page 8,
lines 2 to 20:

> A delay value for local clock indicates the amount
> of time by which a rising (e.g., leading) edge of a
> launch clock signal input to a latch associated
> with the local clock is to be delayed. Delaying
> the rising (e.g., leading) edge of the launch clock
> signal input to a latch during circuit timing
> simulation allows the timing tool to effectively
> simulate circumstances in which data arrives at the
> latch after the rising edge of the launch clock but
> is nevertheless launched out of the latch (e.g.,
> due to latch transparency) without the simulation
> resulting in an error condition. That is, because
> the launch clock signal input to the latch (e.g.,
> the slave latch in a master-slave latch set) during
> the timing simulation is delayed, the timing tool
> treats the data that would otherwise arrive at the
> latch after the rising edge of the launch clock
> signal as if it arrives at the latch prior to the
> rising edge of the launch clock signal. Therefore,
> the timing tool does not generate an error
> condition. (Applicants' specification, page 8,
> lines 2 to 20)

Thus, Applicants' specification clearly describes a method of
how a latch may be modeled as transparent: by "[d]elaying the
rising (e.g., leading) edge of the launch clock signal input to
a latch during circuit timing modeling." The Examiner is again
respectfully reminded that Applicants are not required to
recite definitions in the claims and that language that
encompasses multiple methods may be used. Therefore,
Applicants respectfully object to the Examiner's requirement to
further narrow Claims 1 and 18 without providing a reference
that discloses Applicants invention as claimed. Absent such a
reference, Applicants respectfully request withdrawal of the
Examiner's objection "e[1]."

        e[2]. The Examiner objected to Claims 1 and 18 as
unclear for not explicitly indicating what "is still being

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modeled" in the claims. Applicants respectfully traverse the
Examiner's objection. However, solely to expedite prosecution,
Applicants have amended the claims to make explicit that which
was implicit. Specifically, Applicants have amended Claims 1
and 18 to clarify that the selected subset of one or more
latches of the circuit design is what "is still being modeled."
In other words, Applicants have amended Claims 1 and 18 to
recite "while the selected subset is still being modeled."
Thus, Applicants respectfully request withdrawal of the
Examiner's objection "e[2]."

       f. The Examiner asserts that the term "input" in
Claim 24 should be defined. Applicants respectfully traverse
the Examiner's objection. However, solely to expedite
prosecution, Applicants have amended the claims to make
explicit that which was implicit. Specifically, Applicants
have amended Claim 24 to recite "a signal input." Therefore,
Applicants respectfully request withdrawal of the Examiner's
objection "f."

       g. The Examiner asserts that an apparent
contradiction in Claims 1, 18, and 24 renders the claims
unclear. Specifically, the Examiner finds that it is unclear
how "allowing . . . latches . . . to exhibit latch transparency
while still being modeled as non-transparent by the timing
tool" may be performed. Applicants respectfully direct the
Examiner's attention to Applicants' specification at page 7,
line 30 to page 8, line 25. This passage of Applicants'
specification explains that in some embodiments, Applicants'
invention models latches as non-transparent but delays "the
rising (e.g., leading) edge of the launch clock signal input to
a latch during circuit timing simulation [which] allows the
timing tool to effectively simulate circumstances in which data
arrives at the latch after the rising edge of the launch clock
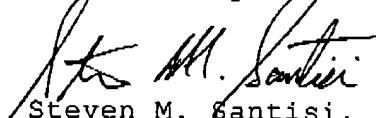but is nevertheless launched out of the latch (e.g., due to

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latch transparency) without the simulation resulting in an error condition." Page 8, lines 5 to 13. In other words, a latch can be made to exhibit latch transparency by delaying the rising edge of the launch clock signal input to the latch. This delaying of an input signal can be done to a latch that is being modeled as non-transparent. Thus, Applicants' specification makes it clear that the apparent contradiction of Claims 1, 18, and 24, is not in fact a contradiction at all. Therefore, Applicants respectfully request withdrawal of the Examiner's objection "g."

CONCLUSION

The Applicants believe all the claims to be in condition for allowance, and respectfully request withdrawal of the objections and issuance of a Notice of Allowance.

Applicants do not believe any fees are due in conjunction with this amendment. However, if an Extension of Time is required to make this response timely, please accept this sentence as such a request and charge Deposit Account No. 04-1696 the requisite fee. Applicants do not believe any other fees are due regarding this amendment. If any other fees are required, however, please charge Deposit Account No. 04-1696. The Applicant encourages the Examiner to telephone Applicant's attorney should any issues remain.

Respectfully Submitted,

Steven M. Santisi, Esq.
Registration No. 40,157
Dugan & Dugan, PC
Attorneys for Applicants
(914) 332-9081

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            Tarrytown, New York

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